

CLAIMS

- 5
10

1. A method for moisturizing the eye comprising controllably administering to the surface of the eye an aqueous fluid in an amount that is sufficient to increase the volume of the aqueous layer of the tear film by at least 5% of the volume of the normal aqueous layer and which amount is less than that which causes runoff of the tear film from the eye and permitting the fluid to hydrate the aqueous layer of the tear film.

2. The method of claim 1 wherein the amount of fluid is between 50 and 200% of the volume of the normal aqueous layer of the tear film.

- 15 3. The method of claim 1 wherein the fluid is
administered in the form of a mist.

4. The method of claim 3 wherein the mist is composed of droplets having an average volume of about 0.1% to 1% of the volume of the normal tear film.

5. The method of claim 3 wherein the mist is composed of droplets having an average size of between about 5 and 150 microns in diameter.

6. The method of claim 5 wherein the average size of the droplets is between 10 and 50 microns in diameter.

7. The method of claim 6 wherein the average size of the droplets is between 15 and 30 microns in diameter.

8. The method of claim 1 wherein quantity of fluid that is administered to the eye surface is less than about 10 μ l.

9. The method of claim 8 wherein the quantity is between about 0.5 and 6 μ l.

10. The method of claim 9 wherein the quantity
5 is between about 2 and 5 μ l.

11. The method of claim 1 wherein the fluid has administered has an osmolarity of less than that of the normal aqueous layer of the tear film.

10

12. The method of claim 11 wherein the osmolarity is less than 311 mOsm.

15

15 the fluid is less than 7.

— 110 —

14. The method of claim 13 wherein the pH is about 6.5.

1

15. A method for moisturizing the surface of the eye comprising administering to said surface of the eye between 0.5 and 20 μ l of an aqueous fluid within about 10 seconds and permitting said fluid to hydrate the aqueous layer of the tear film of said eye.

25

16. The method of claim 15 wherein the administration is by a mist having an average droplet size between 5 and 150 microns in diameter.

30

17. The method of claim 16 wherein the droplet size is between 10 and 50 microns in diameter.

18. The method of claim 17 wherein the droplet size is between 15 and 30 microns in diameter.

19. A kit for moisturizing the eye comprising
a container, a fluid within said container, an actuator
that delivers between 0.5 and 20 μ l of said fluid within
about 10 seconds, and instructions for delivering said
dose of fluid to the surface of the eye.

20. The kit of claim 19 wherein the actuator delivers the fluid as a mist having an average droplet size between 50 and 150 microns in diameter.

10

21. The kit of claim 20 wherein the average droplet size is between 10 and 50 microns in diameter.

15

22. The kit of claim 21 wherein the average droplet size is between about 15 and 30 microns in diameter.

25

23. A method for moisturizing the eye comprising administering to the surface of said eye between 0.5 and 10 μ l of an aqueous fluid wherein said fluid is in the form of a mist comprised of droplets having an average size between 5 and 150 microns and wherein the fluid has a pH less than or equal to 7.0 and an osmolarity below that of the normal tear film and permitting said fluid to rehydrate the aqueous portion of the tear film of said eye.

Add 7